

Amendments to the Claims

1. (Currently Amended) A capacitive touchpad comprising a plurality of spaced apart conductors located across a plane of a supporting medium and an electrically conductive medium located in a plane that is substantially parallel to the plane of the supporting medium, said plurality of spaced apart conductors comprising a first series of conductors extending in a first direction on a first plane and a second series of conductors extending in a second, different, direction on a second plane, said second plane being substantially parallel to said first plane, wherein said supporting medium supports said plurality of spaced apart conductors wherein there is no electrical contact between said plurality of spaced apart conductors, each of said spaced apart conductors being sensitive to a proximity of a finger to modify a capacitance of said spaced apart conductor to detect the presence of the finger positioned close to said spaced apart conductor, said electrically conductive medium being proximal to said plurality of spaced apart conductors to concentrate an electric field between said plurality of spaced apart conductors towards the plane of said supporting medium and adapted to locally modify a capacitive environment between a subset of said plurality of spaced apart conductors without distortion of said conductive medium, wherein said conductive medium has a resistivity in the range of 100 ohms per square to 10,000,000 ohms per square.

2. - 3. (Cancelled)

4. (Previously Presented) The touchpad as claimed in claim 1, wherein said electrically conductive medium is adapted to accentuate the variation in capacitance of a conductor and to control the dispersion of a resulting capacitive signal propagating from substantially the proximity of the finger.

5. (Previously Presented) The touchpad as claimed in claim 1, wherein said supporting medium is electrically insulating.

6. (Previously Presented) The touchpad as claimed in claim 1, wherein said conductive medium is in the form of a conductive layer covering at least a portion of said supporting medium.

7. (Previously Presented) The touchpad as claimed in claim 6, wherein said conductive layer is discontinuous.
8. (Previously Presented) The touchpad as claimed in claim 6, wherein said conductive layer is selectively supported by a first surface of said supporting medium or a first surface of a dielectric medium.
9. (Previously Presented) The touchpad as claimed in claim 8, wherein said dielectric medium has a thickness which is relatively large as compared to the thickness of said conductive layer.
10. (Previously Presented) The touchpad as claimed in claim 6, further comprising a non-conductive layer proximate to said conductive layer, wherein said non-conductive layer is configured to prevent direct user contact with the conductive layer.
11. (Previously Presented) The touchpad as claimed in claim 8, wherein said supporting medium and said conductive layer are separated by said dielectric medium.
12. (Previously Presented) The touchpad as claimed in claim 8, wherein said conductive layer is sandwiched between said supporting medium and said dielectric medium.
13. (Previously Presented) The touchpad as claimed in claim 8, wherein said supporting medium is sandwiched between said conductive layer and said dielectric medium.
14. (Previously Presented) The touchpad as claimed in claim 8, comprising a further conductive layer proximate to said dielectric medium and sandwiching said dielectric medium between said further conductive layer and said conductive layer.
15. (Cancelled)
16. (Previously Presented) The touchpad as claimed in claim 1, wherein said conductive medium electrically floats or is grounded to earth.

17. (Previously Presented) The touchpad as claimed in claim 16, wherein said conductive medium is selectively grounded by a wire or a resistor.

18. (Previously Presented) The touchpad as claimed in claim 6, wherein said conductive layer comprises a plurality of electrically isolated conductive regions selectively separated by regions of a first surface of said supporting medium or a first surface of said dielectric medium.

19. (Previously Presented) The touchpad as claimed in claim 18, wherein the separations between said conductive regions are relatively small compared to the width of said conductive regions, so as to selectively allow capacitive coupling of adjacent regions via said supporting medium or said dielectric medium.

20. (Previously Presented) The touchpad as claimed in claim 14, wherein said further conductive layer is supported by a second surface of said dielectric medium, said second surface being in substantially opposed relation to said first surface of said dielectric medium.

21. (Previously Presented) The touchpad as claimed in claim 20, wherein said further conductive layer comprises a plurality of electrically isolated conductive regions separated by regions of said second surface of said dielectric medium.

22. (Previously Presented) The touchpad as claimed in claim 21, wherein said conductive regions on said first surface of said dielectric medium and said conductive regions on said second surface of said dielectric medium are registered to each other by virtue of corresponding substantially coterminous areas.

23. (Previously Presented) The touchpad as claimed in claim 21, wherein said conductive regions on said first surface of said dielectric medium and said conductive regions on said second surface of said dielectric medium are registered to each other by virtue of corresponding overlapping non-coterminous areas.

24. (Previously Presented) The touchpad as claimed in claim 22, wherein said registered regions are capacitively coupled via said dielectric medium.

25. (Previously Presented) The touchpad as claimed in claim 18, wherein said conductive regions are substantially rectangular.

26. (Previously Presented) The touchpad as claimed in claim 8, wherein said conductive layer comprises a plurality of electrically isolated conductive regions selectively separated by regions of said first surface of said supporting medium or said first surface of said dielectric medium, each conductive region of said plurality of conductive regions being linked by one or more conductive bridges to adjacent conductive regions, said conductive bridges having a width substantially smaller than the width of said conductive regions.

27. (Previously Presented) The touchpad as claimed in claim 26, wherein said conductive regions have a relatively large thickness and said conductive bridges have a relatively small thickness to increase the resistance in said conductive layer.

28. (Previously Presented) The touchpad as claimed in claim 1, wherein said supporting medium and said conductive medium are formed as a single conductive support and sensing layer.

29. (Previously Presented) The touchpad as claimed in claim 28, wherein said single conductive support and sensing layer is formed from a bulk doped medium having a bulk conductivity.

30. (Previously Presented) The touchpad as claimed in claim 29, wherein said bulk doped medium is glass or plastic comprising a dopant of conductive material.

31. (Previously Presented) The touchpad as claimed in claim 30, wherein said conductive material is selectively particulate or fibrous.

32. (Previously Presented) The touchpad as claimed in claim 31, wherein said particulates may be selectively formed from metal or metal oxides with a size up to 10 microns wide.

33. (Previously Presented) The touchpad as claimed in claim 31, wherein said fibrous material may be selectively formed from nanotubes or carbon fibers with a length up to 10 millimeters.

34. (Previously Presented) The touchpad as claimed in claim 28, wherein said plurality of conductors are substantially contained within said single conductive support and sensing layer.

35. (Previously Presented) The touchpad as claimed in claim 1, wherein said plurality of conductors are each electrically insulated.

36. (Previously Presented) The touchpad as claimed in claim 35, wherein each conductor of said plurality of conductors is coated with an electrically insulating sheath.

37. (Previously Presented) The touchpad as claimed in claim 28, wherein said conductive support and sensing layer has a textured surface in the form of surface distortions for the redirection of a point of touch.

38. (Previously Presented) The touchpad as claimed in claim 1, wherein said touchpad is arranged into a non-planar configuration.

39. (Previously Presented) The touchpad as claimed in claim 1, wherein said touchpad is resilient.

40. (Previously Presented) The touchpad as claimed in claim 1, wherein said touchpad is deformable.

41. (Previously Presented) The touchpad as claimed in claim 1, wherein said conducting medium is selectively Indium Tin Oxide (ITO) or Antimony Tin Oxide (ATO).

42. (Previously Presented) A touchpad system including a touchpad as claimed in claim 1 including a sensing circuit comprising a touch detector circuit and a wake up circuit, said sensing circuit periodically sleeping and waking to measure the state of said touchpad, wherein in response to a touch, said sensing circuit wakes up, if sleeping, and scans the surface to determine the touch position.

43. (Previously Presented) The touchpad system as claimed in claim 42, wherein the touch is detected in less than about 3 microseconds.

44. (Previously Presented) The touchpad system as claimed in claim 42, wherein the power consumption of said sensing circuit is less than about 10 microamps when sleeping.

45. (Currently amended) The touchpad as claimed in claim 1 wherein said plurality of conductors comprises [[a]] said first series of spaced-apart conductors and [[a]] said second series of spaced apart conductors disposed in intersecting relation.